



EAST KENTUCKY POWER COOPERATIVE

November 5, 2007

OVERNIGHT DELIVERY

Ms. Elizabeth O'Donnell
Executive Director
Public Service Commission
211 Sower Boulevard
Frankfort, KY 40602

RECEIVED

NOV 06 2007

**PUBLIC SERVICE
COMMISSION**

Re: PSC Case No. 2007-00462

Dear Ms. O'Donnell:

Please find enclosed for filing with the Commission an original and ten copies of a revised Exhibit 4 to the Application of East Kentucky Power Cooperative, Inc., for Approval of the Issuance of Clean Renewable Energy Bonds in an Amount up to \$15.8 million for a Term of up to Sixteen Years. This amended Exhibit 4 is filed to address the Commission's deficiency notice, dated November 1, 2007.

Very truly yours,

Charles A. Lile
Senior Corporate Counsel

Enclosures

RECEIVED

NOV 06 2007

PUBLIC SERVICE
COMMISSION

EXHIBIT 4

Page 1 of 7

EAST KENTUCKY POWER COOPERATIVE, INC.

DESCRIPTION OF FACILITIES TO BE CONSTRUCTED

The proceeds from the Clean Renewable Energy Bonds ("CREB's") will be used as part of East Kentucky Power Cooperative, Inc.'s ("EKPC") partial or full funding for the construction of five capital projects that will produce electricity from gas derived from the biodegradation of municipal solid waste. The estimated total cost for these projects is \$ 15,785,952.

A description of the five projects and their estimated CREB fundable costs are:

- Hardin County Landfill Gas to Energy ("LFGTE") Generating Project

This project was approved by the Kentucky Public Service Commission ("KPSC") through Case No. 2005-00164. EKPC has constructed, owns and operates the 4.0 MW project. EKPC's scope included a masonry building of approximately 5,000 square feet, three (3) Caterpillar model 3516 low emission engine/generator sets each rated at 800 kW, switchgear, controls, fuel compressor equipment, and all transformers and communications equipment to interconnect with an existing 12.47 kW distribution line on the site. EKPC has leased a plant site from Hardin County of approximately two (2) acres in size on a previously disturbed area at the landfill. The lease is for a minimum 20-yr term with additional 5-yr term options. In January 2006, the plant went into commercial operation. The plans and contracts for this project are included in Appendix A, whereas the maps were included in the above mentioned approved Case no. 2005-00164.

The cost breakdown is as follows:

	<u>Estimated Cost</u>	<u>USoA</u>
3- 3516 engine/gensets	\$1,050,000	344
Switchgear	320,000	345
Fuel Gas Compressor System	233,000	343
Motor Control Center	40,000	345
Gas Chromatograph	40,000	346
4160/480 VAC Transformer	10,000	353
Gas Collection System	700,000	124
Masonry Building (incl. site prep)	1,200,000	341
Development Costs	20,000	Spread as Overhead to a/c's 341-346
Architect/Engineering Fees	125,000	Spread as Overhead to a/c's 341-346
Transmission Interconnect (Incl GSU, SCADA, etc)	750,000	Spread as Overhead to a/c's 341-346
Tools/Spare Parts	50,000	Spread as Overhead to a/c's 341-346
Other Expenses	<u>436,900</u>	Spread as Overhead to a/c's 341-346
Total Expenditures	\$4,974,900	

Note: EKPC is seeking reimbursement of funds from the above estimated total that will be paid subsequent to EKPC Board Approval of the Inducement Resolution on December 6, 2005. Prior to passing the Inducement Resolution, \$1,230,147.72 of the above total estimate was paid on the project, leaving a net unpaid balance of \$3,744,753.28.

- Laurel Ridge 5th Engine for the existing LFGTE

This project was approved by the KPSC through Case No. 2002-00474. Upon executing a landfill gas purchase agreement and long term site lease with Waste Management (“WM”) and receiving all necessary permits and approvals, EKPC constructed a 4.0 MW (3.2 MW initially installed) base load landfill gas to electric generating facility on property leased from WM. The project is designed to accommodate up to five (5) Caterpillar model 3516 low emission reciprocating engines each rated at about 800 kW, switchgear, controls, and a gas compressor housed inside a masonry building. A 4.16 kV to 12.47 kV transformer will be located outside the plant. In September of 2003, the plant went into commercial operation with four (4) of the Caterpillar engine/gensets.

During the summer of 2005, Waste Management completed filling the existing cell and began installing additional gas collection wells and leachate pumps that will ultimately lead to the recovery of more gas from the cell. EKPC installed a 5th engine in the plant to be able to take advantage of the additional fuel supply. The installation was completed in December of 2005. The plans and contracts for this project are included in Appendix A, whereas the maps were included in the above mentioned approved Case no. 2002-00474.

The cost breakdown for the installation of the 5th engine/genset is as follows:

	<u>Estimated Cost</u>	<u>USoA</u>
1- Caterpillar 3516 low emission genset	\$375,000	344
Mechanical installation	110,000	Spread as Overhead to a/c's 341-346
Electrical Installation	50,000	Spread as Overhead to a/c's 341-346
Other Expenses	<u>26,750</u>	Spread as Overhead to a/c's 341-346
Total Expenditures	\$ 561,750	

Note: EKPC is seeking reimbursement of funds from the above estimated total that will be paid subsequent to EKPC Board Approval of the Inducement Resolution on December 6, 2005. Prior to passing the Inducement Resolution, \$ 441,201.53 of the above total estimate was paid on the project, leaving a net unpaid balance of \$120,548.47.

- Pendleton County LFGTE

This project was approved by the KPSC through Case No. 2006-00033. EKPC will construct own and operate the 4.0 MW LFGTE project. EKPC's scope includes a masonry building of approximately 5,000 square feet, initially, four (4) Caterpillar model 3516 low emission engine/generator sets each rated at 800 kW, switchgear, controls, fuel compressor equipment,

and all transformers and communications equipment to interconnect with an existing 12.47 kW distribution line on the site. EKPC has designed the facility to accommodate one (1) future 800 kW generating unit. EKPC will lease a plant site from Rumpke of approximately one (1) acre in size on a previously disturbed area at the landfill. The Agreement is for initially 20-yr with up to two optional 5-yr terms. In February 2006, the plant went into commercial operation. The plans and contracts for this project are included in Appendix A, whereas the maps were included in the above mentioned approved Case no. 2003-00033.

The cost breakdown is as follows:	<u>Estimated Cost</u>	<u>USoA</u>
4-3516 800 kW engine/gensets	\$1,500,000	344
Switchgear	350,000	345
Fuel Gas Compressor System	260,000	343
Motor Control Center	40,000	345
Gas Chromatograph	40,000	346
4160/480 VAC Transformer	6,000	353
LFG Collection System Incentive	750,000	124
Masonry Building (incl site prep)	1,200,000	341
Development Costs	30,000	Spread as Overhead to a/c's 341-346
Architect/Engineering Fees	100,000	Spread as Overhead to a/c's 341-346
Transmission Interconnect (Incl GSU, SCADA, etc)	550,000	Spread as Overhead to a/c's 341-346
Tools/Spare Parts	50,000	Spread as Overhead to a/c's 341-346
Expenses	<u>453,800</u>	Spread as Overhead to a/c's 341-346
Total Expenditures	\$ 5,329,800	

- Maysville-Mason County LFGTE

This project has not been submitted to the KPSC for approval yet, but there are plans to submit the application in the near future after EKPC has obtained the signed Gas Purchase contracts. If the KPSC approves the project, then EKPC would enter into equipment and general construction contracts. A proposed layout map/plan is included as Exhibit 4, page 6 of 7. EKPC's scope may include a masonry building of approximately 2,000 square feet, initially, one (1) Caterpillar model 3516 low emission engine/generator sets rated at 800 kW or other type of smaller generating unit(s), switchgear, controls, fuel compressor equipment, and all transformers and communications equipment to interconnect with an existing 12.47 kW distribution line on the site. EKPC plans to lease a plant site from Mason County of approximately one half (1/2) acre in size on a previously disturbed area at the landfill. The proposed Agreement is for an initial 20-yr term with optional 5-yr terms. It is proposed that this plant will be in operation in November 2008.

EXHIBIT 4
Page 4 of 7

The estimated cost breakdown is as follows:

	<u>Estimated Cost</u>	<u>USoA</u>
1- 3516 engine/gensets or other	\$400,000	344
Switchgear	50,000	345
Fuel Gas Compressor System	100,000	343
Motor Control Center	20,000	345
Gas Gem Meter	10,000	346
LFG Collection System Incentive	50,000	124
Masonry Building	400,000	341
Development Costs	20,000	Spread as Overhead to a/c's 341-346
Architect/Engineering Fees	60,000	Spread as Overhead to a/c's 341-346
Transmission Interconnect (Incl. GSU, SCADA, etc.)	150,000	Spread as Overhead to a/c's 341-346
Tools/Spare Parts	25,000	Spread as Overhead to a/c's 341-346
Other Expenses	<u>116,250</u>	Spread as Overhead to a/c's 341-346
Total Estimate	<u>\$1,391,250</u>	

- Montgomery County LFGTE

This project has not been submitted to the KPSC for approval yet, but there are plans to submit the application in the near future after EKPC has obtained the signed Gas Purchase contracts. If the KPSC approves the project, then EKPC would enter into equipment and general construction contracts. A proposed layout map/plan is included as Exhibit 4, page 7 of 7. EKPC proposes to construct, own and operate the 4.0 MW project. EKPC's scope includes a masonry building of approximately 5,000 square feet, three (3) Caterpillar model 3516 low emission engine/generator sets each rated at 800 kW, switchgear, controls, fuel compressor equipment, and all transformers and communications equipment to interconnect with an existing 12.47 kW distribution line on the site or build a 12.47W express feeder to the nearest substation. EKPC proposes to lease a plant site from Rumpke of approximately one (1) acre in size on a previously disturbed area at the landfill. The Site Lease will run concurrent to the Gas Purchase Agreement and propose a minimum 20-yr term with additional 5-yr term options. It is proposed that this plant will be in operation in November 2009.

The estimated cost breakdown is as follows:

	<u>Estimated Cost</u>	<u>USoA</u>
3-3516 engine/gensets	\$1,272,000	344
Switchgear	320,000	345
Fuel Gas Compressor System	240,000	343
Motor Control Center	50,000	345
Gas Chromatograph	40,000	346
4160/480 VAC Transformer	10,000	353
Gas Collection System Incentive	700,000	124
Masonry Building (incl. site prep)	1,350,000	341
Development Costs	20,000	Spread as Overhead to a/c's 341-346
Architect/Engineering Fees	100,000	Spread as Overhead to a/c's 341-346
Transmission Interconnect (Incl GSU, SCADA, etc)	600,000	Spread as Overhead to a/c's 341-346
Tools/Spare Parts	50,000	Spread as Overhead to a/c's 341-346
Other Expenses	<u>447,600</u>	Spread as Overhead to a/c's 341-346
Total Estimate	<u>\$5,199,600</u>	

- Benson Valley LFGTE

The project will not be funded by these CREB's. EKPC has not been able to obtain a contract with landfill owners to warrant going forward with this project at this time.